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Semiclassical Monte Carlo model for in-plane transport of spin-polarized electrons in III-V heterostructures

Saikin S., Shen M., Cheng M., Privman V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The study of the in-plane transport of spin-polarized electrons in III-V semiconductor quantum wells was presented in the article. The Monte Carlo simulations were performed for temperatures in the range 77-330 K. The results for dynamics of the spin polarization in a single quantum well at several temperatures and intermediate, ~2-4 kV/cm, electric fields, were reported.

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